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FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.2850004

APPLICATION NO.
09/177,387

APPLICANT
HARTLEY *et al.*

FILING DATE
October 23, 1998

GROUP
1636

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
dy	AA1	4,673,640	06/16/1987	Backman, K.C.	435	68-69.1	04/30/1984
	AB1	5,434,066	07/18/1995	Bebbe <i>et al.</i>	435	472-3.476	03/15/1994
	AC1	5,591,609	01/07/1997	Auerbach, J.I.	435	91.2	02/03/1995
	AD1	5,744,336	04/28/1998	Hodges <i>et al.</i>	435	472-3.32.1	03/08/1996
	AE1	5,776,449	07/07/1998	Baum, J.A.	424	93.2	09/20/1996
	AF1	5,851,808	12/22/1998	Elledge <i>et al.</i>	435	472-3.91.4	02/28/1997
dy	AG1	5,888,732	03/30/1999	Hartley <i>et al.</i>	435	472-3.6	02/28/1997
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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
dy	AL1	EP 0 300 422	01/25/1989	Europe	—	—	Yes No
	AM1	WO 91/16427	10/31/1991	WIPO	—	—	Yes No
	AN1	WO 93/19172	09/30/1993	WIPO	—	—	Yes No
	AO1	WO 96/40724	12/19/1996	WIPO	—	—	Yes No
dy	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

dy	AR	1	Abremski, K., and Gottesman, S., "Purification of the Bacteriophage λ <i>xis</i> Gene Product Required for λ Excisive Recombination," <i>J. Biol. Chem.</i> 257:9658-9662 (1982).
	AS	1	Abremski, K., <i>et al.</i> , "Bacteriophage P1 Cre- <i>loxP</i> Site-specific Recombination: Site-specific DNA Topoisomerase Activity of the Cre Recombination Protein," <i>J. Biol. Chem.</i> 261:391-396 (1986).
dy	AT	1	Adams, D. E., <i>et al.</i> , "Cre- <i>lox</i> Recombination in <i>Escherichia coli</i> Cells: Mechanistic Differences from the <i>in Vitro</i> Reaction," <i>J. Mol. Biol.</i> 226:661-673 (1992).

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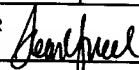
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	AR	<u>2</u>	Araki, H., <i>et al.</i> , "Site-specific Recombinase, R, Encoded by Yeast Plasmid pSR1," <i>J. Mol. Biol.</i> 225:25-37 (1992).
	AS	<u>2</u>	Argos, P., <i>et al.</i> , "The integrase family of site-specific recombinases: regional similarities and global diversity," <i>EMBO J.</i> 5:433-440 (1986).
	AT	<u>2</u>	Atlung, T., <i>et al.</i> , "A versatile method for integration of genes and gene fusions into the λ attachment site of <i>Escherichia coli</i> ," <i>Gene</i> 107:11-17 (1991).

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	AR	<u>3</u>	Balakrishnan, R., <i>et al.</i> , "A gene cassette for adapting <i>Escherichia coli</i> strains as hosts for <i>att</i> -Int-mediated rearrangement and p_L expression vectors," <i>Gene</i> 138:101-104 (1994).
	AS	<u>3</u>	Bernard, P., and Couturier, M., "Cell Killing by the F Plasmid CcdB Protein Involves Poisoning of DNA-Topoisomerase II Complexes," <i>J. Mol. Biol.</i> 226:735-745 (1992).
	AT	<u>3</u>	Black, L.W., "In vitro packaging into phage T4 particles and specific recircularization of phage lambda DNAs," <i>Gene</i> 46:97-101 (1986).

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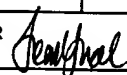
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	AR	<u>4</u>	Boyd, A. C., "Turbo cloning: a fast, efficient method for cloning PCR products and other blunt-ended DNA fragments into plasmids," <i>Nucl. Acids Res.</i> 21:817-821 (1993).
	AS	<u>4</u>	Broach, J. R., <i>et al.</i> , "Recombination within the Yeast Plasmid 2 μ Circle is Site-Specific," <i>Cell</i> 29:227-234 (1982).
	AT	<u>4</u>	Brunelli, J.P., and Pall, M.L., "Lambda/Plasmid Vector Construction by <i>In Vivo cre/lox</i> -Mediated Recombination," <i>BioTechniques</i> 16:1061-1064 (1994).

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	AR	<u>5</u>	Buchholz, F., <i>et al.</i> , "A simple assay to determine the functionality of Cre or FLP recombination targets in genomic manipulation constructs," <i>Nucl. Acids Res.</i> 24:3118-3119 (August 1996).
	AS	<u>5</u>	Buchholz, F., <i>et al.</i> , "Different thermostabilities of FLP and Cre recombinases: implications for applied site-specific recombination," <i>Nucl. Acids Res.</i> 24:4256-4262 (November 1996).
	AT	<u>5</u>	Campbell, A. M., "Chromosomal Insertion Sites for Phages and Plasmids," <i>J. Bacteriol.</i> 174:7495-7499 (1992).

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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	6	Devine, S. E., and Boeke, J.D., "Efficient integration of artificial transposons into plasmid targets <i>in vitro</i> : a useful tool for DNA mapping, sequencing and genetic analysis," <i>Nucl. Acids Res.</i> 22:3765-3772 (1994).
	AS	6	Diederich, L., <i>et al.</i> , "New Cloning Vectors for Integration into the λ Attachment Site <i>attB</i> of the <i>Escherichia coli</i> Chromosome," <i>Plasmid</i> 28:14-24 (1992).
	AT	6	Elledge, S.J., <i>et al.</i> , " λ YES: A multifunctional cDNA expression vector for the isolation of genes by complementation of yeast and <i>Escherichia coli</i> mutations," <i>Proc. Natl. Acad. Sci. USA</i> 88:1731-1735 (1991).

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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
	AR	Z	Feil, R., <i>et al.</i> , "Regulation of Cre Recombinase Activity by Mutated Estrogen Receptor Ligand-Binding Domains," <i>Biochem. Biophys. Res. Comm.</i> 237:752-757 (August 1997).
	AS	Z	Ferguson, J., <i>et al.</i> , "Construction and characterization of three yeast- <i>Escherichia coli</i> shuttle vectors designed for rapid subcloning of yeast genes on small DNA fragments," <i>Gene</i> 16:191-197 (1981).
	AT	Z	Filutowicz, M., <i>et al.</i> , "Purification of the <i>Escherichia coli</i> integration host factor (IHF) in one chromatographic step," <i>Gene</i> 147:149-150 (1994).

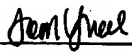
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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
	AR	8	Geoffroy, F., <i>et al.</i> , "A new phage display system to construct multicombinatorial libraries of very large antibody repertoires," <i>Gene</i> 151:109-113 (1994).
	AS	8	Hardy, S., <i>et al.</i> , "Construction of Adenovirus Vectors through Cre- <i>lox</i> Recombination," <i>J. Virol.</i> 71:1842-1849 (March 1997).
	AT	8	Hasan, N., and Szybalski, W., "Control of cloned gene expression by promoter inversion in vivo: construction of improved vectors with a multiple cloning site and the p_{tac} promoter," <i>Gene</i> 56:145-151 (1987).

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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	2	Hasan, N., <i>et al.</i> , "Escherichia coli genome targeting, I. Cre-lox-mediated in vitro generation of <i>ori</i> plasmids and their in vivo chromosomal integration and retrieval," <i>Gene</i> 150:51-56 (1994).
	AS	2	Hashimoto-Gotoh, T., <i>et al.</i> , "Improved vector, pHS664, for direct streptomycin-resistance selection: cDNA cloning with G:C-tailing procedure and subcloning of double-digested DNA fragments," <i>Gene</i> 41:125-128 (1986).
	AT	2	Hoess, R. H., <i>et al.</i> , "The role of the <i>loxP</i> spacer region in P1 site-specific recombination," <i>Nucl. Acids Res.</i> 14:2287-2300 (1986).

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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
	AR	<u>10</u>	Hoess, R. H., and Abremski, K., "The Cre-lox Recombination System," in: <i>Nucleic Acids and Molecular Biology</i> . Vol. 4, Eckstein, F., and D. M. J. Lilley (eds.), Springer-Verlag, Berlin, pp. 99-109 (1990).
	AS	<u>10</u>	Holt, C.L., and May, G.S., "A novel phage λ replacement Cre-lox vector that has automatic subcloning capabilities," <i>Gene</i> 133:95-97 (1993).
	AT	<u>10</u>	Kilby, N.J., <i>et al.</i> , "Site-specific recombinases: tools for genome engineering," <i>Trends in Gen.</i> 9:413-421 (1993). ✓

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	AR	<u>11</u>	Kim, S., and Landy, A., "Lambda Int protein bridges between higher order complexes at two distant chromosomal loci attL and attR," <i>Science</i> 256:198-203 (1992).
	AS	<u>11</u>	Landy, A., "Mechanistic and structural complexity in the site-specific recombination pathways of Int and FLP," <i>Curr. Op. Genet. Develop.</i> 3:699-707 (1993).
	AT	<u>11</u>	Landy, A., "Dynamic, Structural, and Regulatory Aspects of λ Site-Specific Recombination," <i>Annu. Rev. Biochem.</i> 58:913-949 (1989).

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	AR	<u>12</u>	Leong, J.M., <i>et al.</i> , "Generation of single base-pair deletions, insertions, and substitutions by a site-specific recombination system," <i>Proc. Natl. Acad. Sci. USA</i> 82:6990-6994 (1985).
	AS	<u>12</u>	Liu, Q., <i>et al.</i> , "The univector plasmid-fusion system, a method for rapid construction of recombinant DNA without restriction enzymes," <i>Curr. Biol.</i> 8:1300-1309 (November 1998).
	AT	<u>12</u>	Luckow, V. A., <i>et al.</i> , "Efficient Generation of Infectious Recombinant Baculoviruses by Site-Specific Transposon-Mediated Insertion of Foreign Genes into a Baculovirus Genome Propagated in <i>Escherichia coli</i> ," <i>J. Virol.</i> 67:4566-4579 (1993).

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	AR	13	Maeser, S., and Kahmann, R., "The Gin recombinase of phage Mu can catalyse site-specific recombination in plant protoplasts," <i>Mol. Gen. Genet.</i> 230:170-176 (1991).
	AS	13	Mahillon, J., <i>et al.</i> , "IS231 and other <i>Bacillus thuringiensis</i> transposable elements: a review," <i>Genetica</i> 93:13-26 (1994).
	AT	13	Mullins, L.J., <i>et al.</i> , "Efficient Cre-lox linearisation of BACs: applications to physical mapping and generation of transgenic animals," <i>Nucl. Acids Res.</i> 25:2539-2540 (June 1997).

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

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	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>14</u>	Nash, H. A., <i>et al.</i> , "Role of homology in site-specific recombination of bacteriophage λ : Evidence against joining of cohesive ends," <i>Proc. Natl. Acad. Sci. USA</i> 84:4049-4053 (1987).
	AS	<u>14</u>	Nash, H. A., "Purification and Properties of the Bacteriophage Lambda Int Protein," <i>Meth. Enzymol.</i> 100:210-216 (1983).
	AT	<u>14</u>	Numrych, T.E., <i>et al.</i> , "Characterization of the bacteriophage lambda excisionase (Xis) protein: the C-terminus is required for Xis-integrase cooperativity but not for DNA binding," <i>EMBO J.</i> 11:3797-3806 (1992).

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	APPLICANT HARTLEY <i>et al.</i>	
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U.S. PATENT DOCUMENTS							
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	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>15</u>	Nunes-Duby, S.E., <i>et al.</i> , "Half-att Site Substrates Reveal the Homology Independence and Minimal Protein Requirements for Productive Synapsis in λ Excisive Recombination," <i>Cell</i> 59:197-206 (1989).
	AS	<u>15</u>	Oberto, J., <i>et al.</i> , "A segment of the phage HK022 chromosome is a mosaic of other lambdoid chromosomes," <i>Nucl. Acids Res.</i> 22:354-356 (1994).
	AT	<u>15</u>	Palazzolo, M. J., <i>et al.</i> , "Phage lambda cDNA cloning vectors for subtractive hybridization, fusion-protein synthesis and Cre-loxP automatic plasmid subcloning," <i>Gene</i> 88:25-36 (1990).

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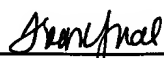
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	AR	<u>16</u>	Pan, G., <i>et al.</i> , "Ligation of Synthetic Activated DNA Substrates by Site-specific Recombinases and Topoisomerase I," <i>J. Biol. Chem.</i> 268:3683-3689 (1993).
	AS	<u>16</u>	Parks, R.J., and Graham, F.L., "A Helper-Dependent System for Adenovirus Vector Production Helps Define a Lower Limit for Efficient DNA Packaging," <i>J. Virol.</i> 71:3293-3298 (April 1997).
	AT	<u>16</u>	Peredelchuk, M.Y., and Bennett, G.N., "A method for construction of <i>E. coli</i> strains with multiple DNA insertions in the chromosome," <i>Gene</i> 187:231-238 (March 1997).

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	AT	<u>17</u>	Richet, E., <i>et al.</i> , "The Interaction of Recombination Proteins with Supercoiled DNA: Defining the Role of Supercoiling in Lambda Integrative Recombination," <i>Cell</i> 46:1011-1021 (1986).

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AR	<u>18</u>	Richet, E., <i>et al.</i> , "Synopsis of Attachment Sites during Lambda Integrative Recombination Involves Capture of a Naked DNA by a Protein-DNA Complex," <i>Cell</i> 52:9-17 (1988).
AS	<u>18</u>	Sadowski, P., "Site-Specific Recombinases: Changing Partners and Doing the Twist," <i>J. Bacteriol.</i> 165:341-347 (1986).
AT	<u>18</u>	Sauer, B., <i>et al.</i> , "Site-specific insertion of DNA into a pseudorabies virus vector," <i>Proc. Natl. Acad. Sci. USA</i> 84:9108-9112 (1987).

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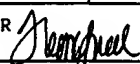
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	AR	<u>19</u>	Sauer, B., "Site-specific recombination: developments and applications," <i>Curr. Op. Biotechnol.</i> 5:521-527 (1994).
	AS	<u>19</u>	Sauer, B., "Multiplex Cre/lox recombination permits selective site-specific DNA targeting to both a natural and an engineered site in the yeast genome," <i>Nucl. Acids Res.</i> 24:4608-4613 (December 1996).
	AT	<u>19</u>	Schindelbauer, D., and Cooke, H.J., "Efficient combination of large DNA <i>in vitro</i> : in gel site specific recombination (IGSSR) of PAC fragments containing α satellite DNA and the human HPRT gene locus," <i>Nucl. Acids Res.</i> 25:2241-2243 (June 1997).

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	AR	<u>20</u>	Schlake, T., and Bode, J., "Use of Mutated FLP Recognition Target (FRT) Sites for the Exchange of Expression Cassettes at Defined Chromosomal Loci," <i>Biochemistry</i> 33:12746-12751 (1994).
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	AT	<u>20</u>	Sizemore, C., <i>et al.</i> , "Quantitative analysis of Tn10 Tet repressor binding to a complete set of tet operator mutants," <i>Nucl. Acids Res.</i> 18:2875-2880 (1990).

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	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
	AR	<u>21</u>	Snaith, M.R., <i>et al.</i> , "Multiple cloning sites carrying <i>loxP</i> and <i>FRT</i> recognition sites for the Cre and Flp site-specific recombinases," <i>Gene</i> 166:173-174 (1995).
	AS	<u>21</u>	Spengler, S.J., <i>et al.</i> , "The Stereostructure of Knots and Catenanes Produced by Phage λ Integrative Recombination: Implications for Mechanism and DNA Structure," <i>Cell</i> 42:325-334 (1985).
	AT	<u>21</u>	Thompson, J.F., <i>et al.</i> , "Helical-repeat dependence of integrative recombination of bacteriophage λ : Role of the <i>P1</i> and <i>H1</i> protein binding sites," <i>Proc. Natl. Acad. Sci. USA</i> 85:6323-6327 (1988).

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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
	AR	<u>22</u>	Tsurushita, N., <i>et al.</i> , "Phage display vectors for in vivo recombination of immunoglobulin heavy and light chain genes to make large combinatorial libraries," <i>Gene</i> 172:59-63 (June 1996).
	AS	<u>22</u>	Vanin, E.F., <i>et al.</i> , "Development of High-Titer Retroviral Producer Cell Lines by Using Cre-Mediated Recombination," <i>J. Virol.</i> 71:7820-7826 (October 1997).
	AT	<u>22</u>	Waterhouse, P., <i>et al.</i> , "Combinatorial infection and <i>in vivo</i> recombination: a strategy for making large phage antibody repertoires," <i>Nucl. Acids Res.</i> 21:2265-2266 (1993).

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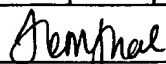
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	AR	23	Weisberg, R. A., and Landy, A., "Site-specific Recombination in Phage Lambda," in: "Lambda II," Hendrix, R. W. <i>et al.</i> , eds., Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N. Y., pp. 211-250 (1983).
	AS	23	Yang, W., and Mizuuchi, K., "Site-specific recombination in plane view," <i>Structure</i> 5:1401-1406 (November 1997).
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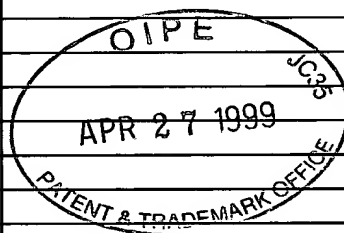
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	AR	<u>23</u>	
	AS	<u>23</u>	
<i>sg</i>	AT	<u>23</u>	Fukushige, S., and Sauer, B., "Genomic targeting with a positive-selection <i>lox</i> integration vector allows highly reproducible gene expression in mammalian cells," <i>Proc. Natl. Acad. Sci. USA</i> 89:7905-7909 (1992).

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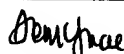
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	AR	24	Lakso, M., <i>et al.</i> , "Targeted oncogene activation by site-specific recombination in transgenic mice," <i>Proc. Natl. Acad. Sci. USA</i> 89:6232-6236 (1992).
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